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Phlebia brevibasidia sp. nov. from India

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Abstract—A new agaricomycetous species, *Phlebia brevibasidia*, is described from Punjab, India.

Key words—*Meruliaceae*, tropical, Anandpur Sahib, *Phlebia cremeoalutacea*, *Phlebia crassisubiculata*

During September 2015, Gurpreet and Avneet collected an unknown agaricomycetous fungus associated with an angiospermous log from Dabri in district Anandpur Sahib, Punjab, India. After comparison of macroscopic and microscopic characters (Rattan 1977; Eriksson et al. 1978, 1981; Bernicchia & Gorjón 2010; MycoBank 2016; Sharma 2012; Singh et al. 2010), it has been identified as a tropical species differentiated from temperate *Phlebia cremeoalutacea* and *P. crassisubiculata* by conspicuous morphological differences. A portion of the basidiocarp was sent to Dr. Nils Hallenberg (Denmark), who confirmed the findings. The holotype has been conserved in the Herbarium, Botany Department, Punjabi University, Patiala, India (PUN).

Phlebia brevibasidia G. Kaur, Avn.P. Singh & Dhingra, **sp. nov.** Plates 1, 2

MycoBank MB 816998

Differs from *Phlebia cremeoalutacea* by its bigger basidiospores, its stalked short basidia, its prominently projecting encrusted cystidia, and its compact pseudoparenchymatous context; and from *P. crassisubiculata* by its stalked short basidia and its thin subiculum.

Type: India, Punjab, Anandpur Sahib, Dabri, on angiospermous log, 30 July 2015, Gurpreet & Avneet 7932 (PUN, **holotype**).

Etymology: The epithet refers to short basidia

Basidiocarp resupinate, adnate, effused, ≤230 µm thick in section, hymenial surface smooth, orange white to pale orange to grayish orange when fresh, not changing much on drying; margins thinning, fibrillose, paler than the

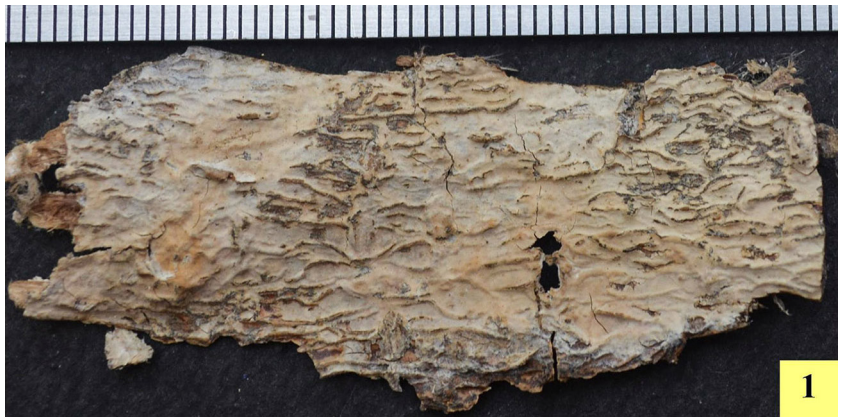

Plate 1. *Phlebia brevibasidia* (holotype, PUN). 1. Basidiocarp showing hymenial surface.

color of the hymenial surface or indeterminate. Hyphal system monomitic. Generative hyphae clamped; subiculum ≤40 µm thick, of thick-walled, less branched, horizontal, ≤4 µm wide hyphae; context and subhymenium pseudoparenchymatous, ≤190 µm thick, of thin-walled, vertical, more branched, densely packed hyphae, ≤3.5 µm wide. Cystidia 58–101 × 12.8–17.5 µm, prominent, subfusiform, thick-walled, with basal clamp, encrusted with crystalline matter; projecting up to 50 µm out of hymenium. Basidia 15–18 × 5–7.3 µm, clavate, stalked, slightly thick-walled, 4-sterigmate, with basal clamp; sterigmata ≤3.8 µm long. Basidiospores 4.5–7.3 × 3.5–4.5 µm, ellipsoid, smooth, inamyloid, acyanophilous.

Remarks—*Phlebia cremeoalutacea* (Parmasto) K.H. Larss. & Hjortstam, a temperate species, differs in having subclavate–clavate basidia (>20 µm long), cystidia either enclosed and non-encrusted or projecting and encrusted, and smaller basidiospores (3–4.5 × 2–2.5 µm; Eriksson et al. 1981). Another temperate species, *P. crassisubiculata* Avn.P. Singh et al., differs in having longer, clavate basidia and a distinctly thicker subiculum (≤120 µm thick; Singh et al. 2010).

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Literature cited

Bernicchia A, Gorjón SP. 2010. *Corticiaceae* s.l. Fungi Europaei 12. Edizioni Candusso. Alassio. Italia. 1008 p.

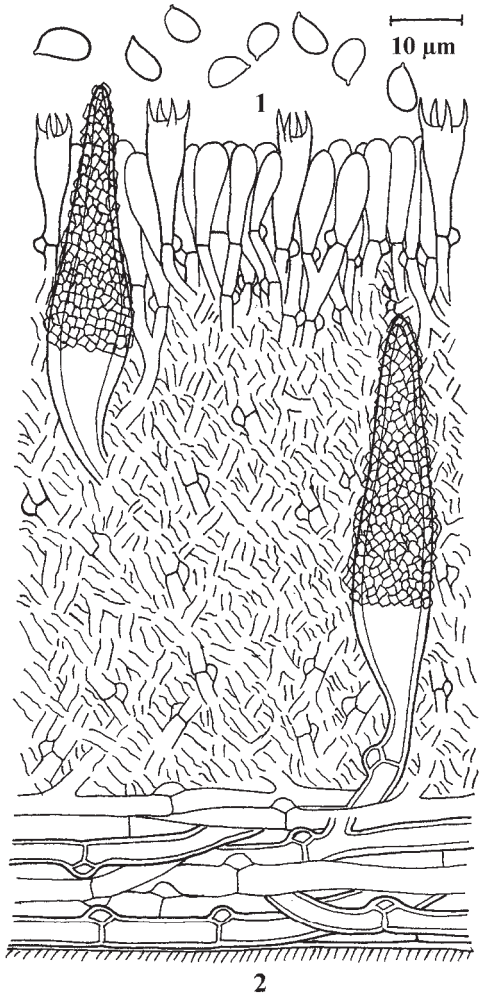

Plate 2. *Phlebia brevibasidia* (holotype, PUN).
1. Basidiospores 2. Vertical section through basidiocarp.

Eriksson J, Hjortstam K, Ryvarden L. 1981. The *Corticiaceae* of North Europe. Vol. 6. *Phlebia* – *Sarcodontia*. Fungiflora, Oslo. pp. 1049–1276.

MycoBank. 2016. Fungal databases. Nomenclature and species banks. [Accessed: 26/03/2015].

Rattan SS. 1977. The resupinate aphyllophorales of the North Western Himalayas. Bibliotheca Mycologica 60. 427 p.

Sharma JR. 2012. Aphyllophorales of Himalaya. Botanical Survey of India, Calcutta. 590 p.

Singh AP, Priyanka, Dhingra GS, Singla N. 2010. A new species of *Phlebia* (*Basidiomycetes*) from India. Mycotaxon 112: 21–24. https://doi.org/10.5248/112.21